NOAA, NATIONAL WEATHER SERVICE, WEATHER FORECAST OFFICE

Miami, Florida 33165

March Continues Warm and Mostly Dry 2012 in South Florida

The warm March experienced over most of the country in March extended down to South Florida as a persistent and unusually-strong high pressure area settled over the eastern two-thirds of the United States (Figure 1). Average March 2012 temperatures over South Florida ranged anywhere from 2 to 4 degrees warmer than normal, which compared to most of the country wasn't too much above normal (Figure 2). Nevertheless, the warm and mostly dry pattern observed so far in 2012 continued in full force during the recently-concluded month of March.

The large and strong high pressure area over the eastern two-thirds of the country acted as a "blocking" mechanism preventing significant intrusions of cooler continental air from the north, instead providing a warm flow of air from the Gulf of Mexico and Atlantic Ocean. The only front to bring any significantly cooler air to South Florida passed through on March 4th, with lowest monthly temperatures ranging from the upper 30s and 40s over interior areas to the lower 50s along the Atlantic and Gulf coasts.

Here are March 2012 average temperatures and departures from normal in degrees F and ranking for select locations:

Location (beginning of period of historical record)	March 2012 Avg Temp	Departure From Normal	Rank
Miami (1895)	75.3	+2.7	8th warmest
Fort Lauderdale (1912)	75.4	+2.5	3rd warmest
West Palm Beach (1888)	73.5	+3.0	12th warmest
Naples (1942)	73.4	+3.4	4th warmest

Precipitation

The lack of strong fronts, along with the stabilizing influence of high pressure in the atmosphere, kept rainfall totals below normal during March. Most areas received anywhere from 1 to 3 inches of rain, which is about 50 to 75 percent of the average total for the month. Some areas over the western sections of the interior peninsula received less than an inch for the entire month, while isolated spots in the metro areas of southeast Florida received over four inches of rain (Figure 3).

Most of the rain in March fell in three periods: March 8-9 over interior and western sections of South Florida resulting from a return flow of moisture from the Atlantic associated with an old frontal boundary, March 15-16 as warm east wind flow and a low pressure area aloft combined to develop areas of showers and thunderstorms and March 31 when isolated heavy showers and thunderstorms affected parts of southeast Florida.

Following are March 2012 rainfall totals, departure from normal in inches and ranking for selected locations (**NOTE**: March 2012 data for Miami Beach and below is through 8 AM March 31st).

Location (beginning of period of historical record)	**March 2012 Rainfall**	**Departure/ Percent From/Of Normal**	**Rank**
Miami (1855)	4.97	+1.97 (166%)	14th wettest
Fort Lauderdale (1912)	1.63	-1.73 (49%)	36th driest
West Palm Beach (1888)	2.29	-2.30 (50%)	52nd driest
Naples (1942)	1.00	-1.38 (42%)	24th driest
Miami Beach (1927)	0.99	-2.01 (33%)	20th driest
Moore Haven (1918)	2.20	-1.21 (65%)	43th driest
The Redland (1942)	2.17	-0.74 (75%)	32nd driest
Hollywood (1963)	2.44	-0.92 (73%)	
Fort Lauderdale Beach	2.39		
Cape Florida	0.45		
Homestead Gen. Airport	1.45		
Juno Beach	4.78		
Palm Beach Gardens	2.10		
Immokalee	0.56	-2.37 (19%)	
Muse (Glades)	0.99		
Big Cypress (Hendry)	1.28		
South Bay	0.85		
Oasis Ranger Station	1.40		
Marco Island	2.13		
LaBelle (1929)	1.57	-1.75 (47%)	32nd driest
Ortona (Glades)	0.60		
Canal Point (1941)	1.60	-2.52 (39%)	19th driest
NWS Miami	2.75		
North Miami Beach	2.32		

Outlook for April-June

The outlook by the Climate Prediction Center (CPC) calls for a continuation of warmer and drier than normal conditions in April as La Niña conditions continue to play a role. The outlook through June continues the warm pattern but is more uncertain about precipitation. A weakening of La Niña this spring could allow for greater instability to return to South Florida during May and June, but the CPC outlook calls for equal chances of above, below or near normal precipitation due to the large amount of uncertainty in the evolution of a departing La Niña.

The drier than normal pattern expected through the end of our dry season, in combination with increasing temperatures through the spring, means that the threat of wildfires increases substantially during April and May. Current Keetch-Byram Drought Index (KBDI) values are in the very high to extreme range over all of South Florida, reflective of very dry soil conditions. High values of the KBDI are an indication that conditions are favorable for the occurrence and spread of wildfires.

All persons are urged to take measures to reduce the chance of wildfires. Visit the Florida Forest Service web site for more information on how to help prevent wildfires.

April and May typically bring persistent easterly winds to the area, which significantly increases the risk of rip currents along the east coast beaches. A sharp increase in drowning deaths and rescues caused by rip currents occurs during the spring months due in part to this shift in the wind patterns. All residents and visitors visiting area beaches are strongly urged to heed the advice of Ocean Rescue lifeguards and swim near a lifeguard. Visit the National Weather Service Rip Current Awareness page for more information.

For the latest south Florida weather information, including the latest watches, advisories and warnings, please visit the National Weather Service Miami Forecast Office's web site at weather.gov/southflorida.

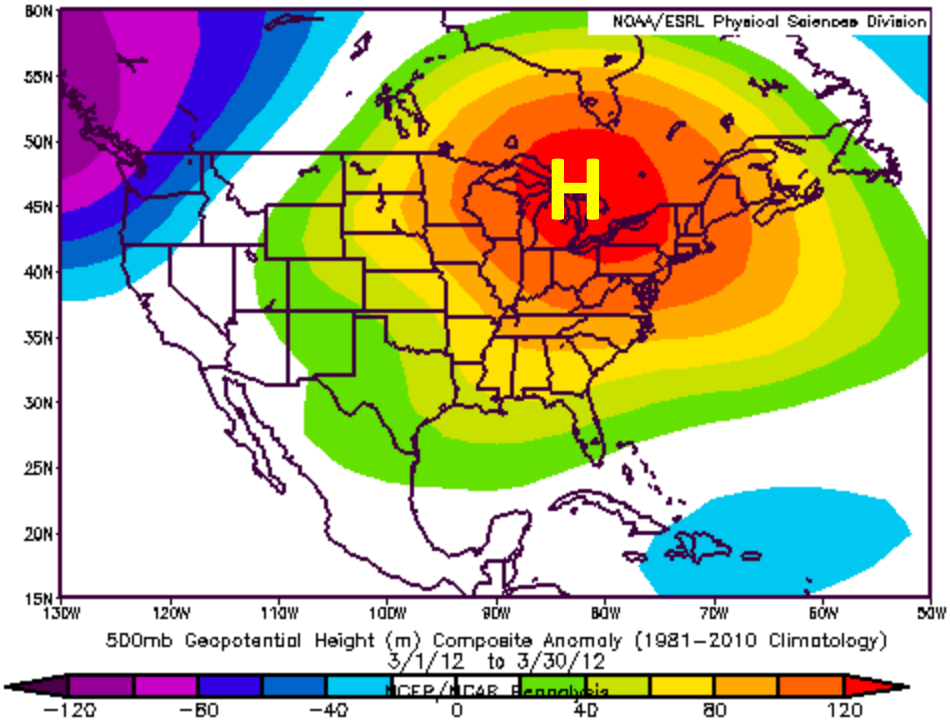

Figure 1: 500 mb (middle-tropospheric) height anomalies for March 2012. Stronger-than-normal high pressure (H) covered the entire eastern two-thirds of the United States, with the southern extent of this strong high pressure cell extending over Florida.

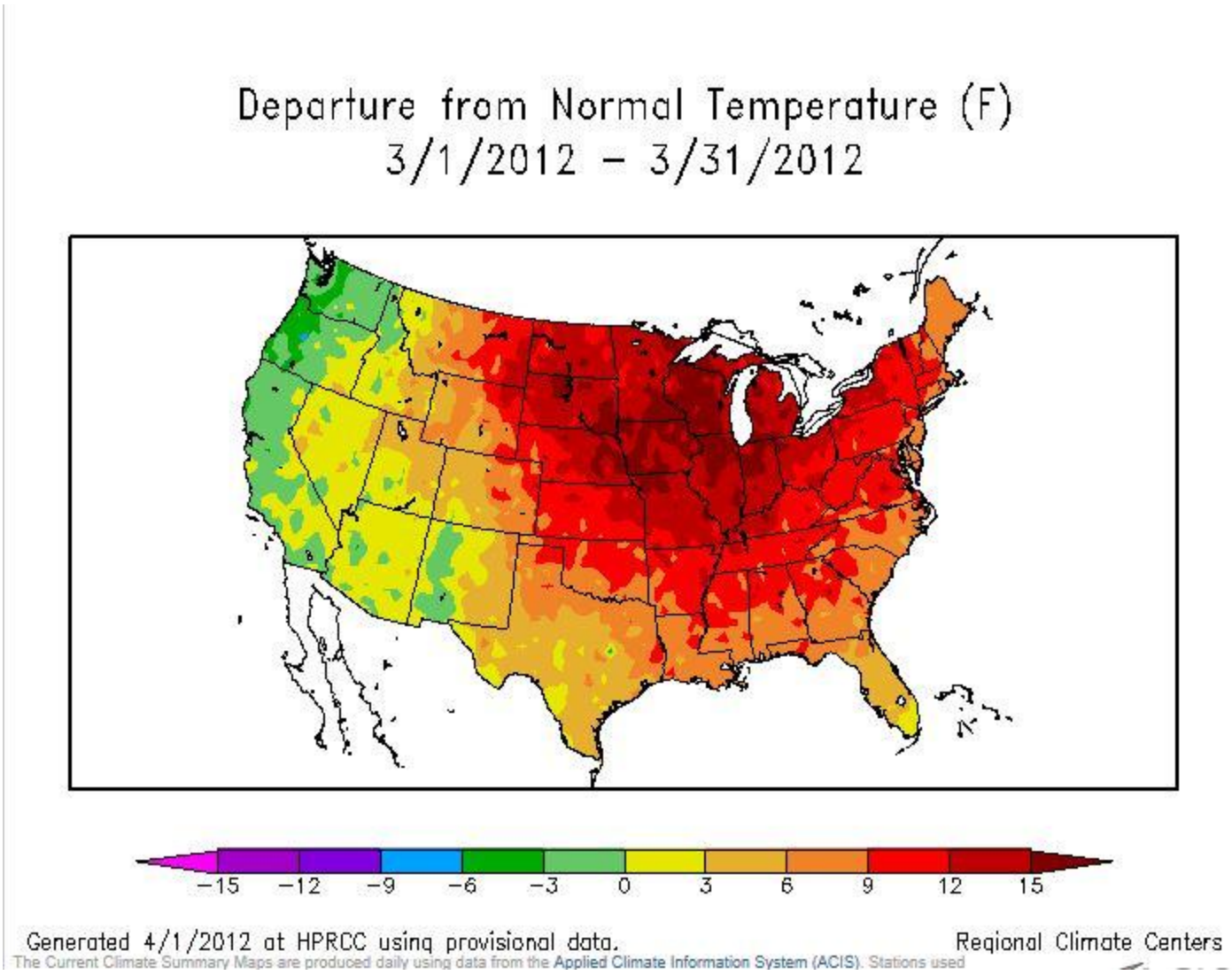

Figure 2: Temperature departures from normal for March 2012. South Florida was 2 to 4 degrees warmer than normal for the month. Much higher temperature departures occurred over the Great Lakes, Midwest and Northeastern United States corresponding to the location of the stronger-than-normal high pressure cell.

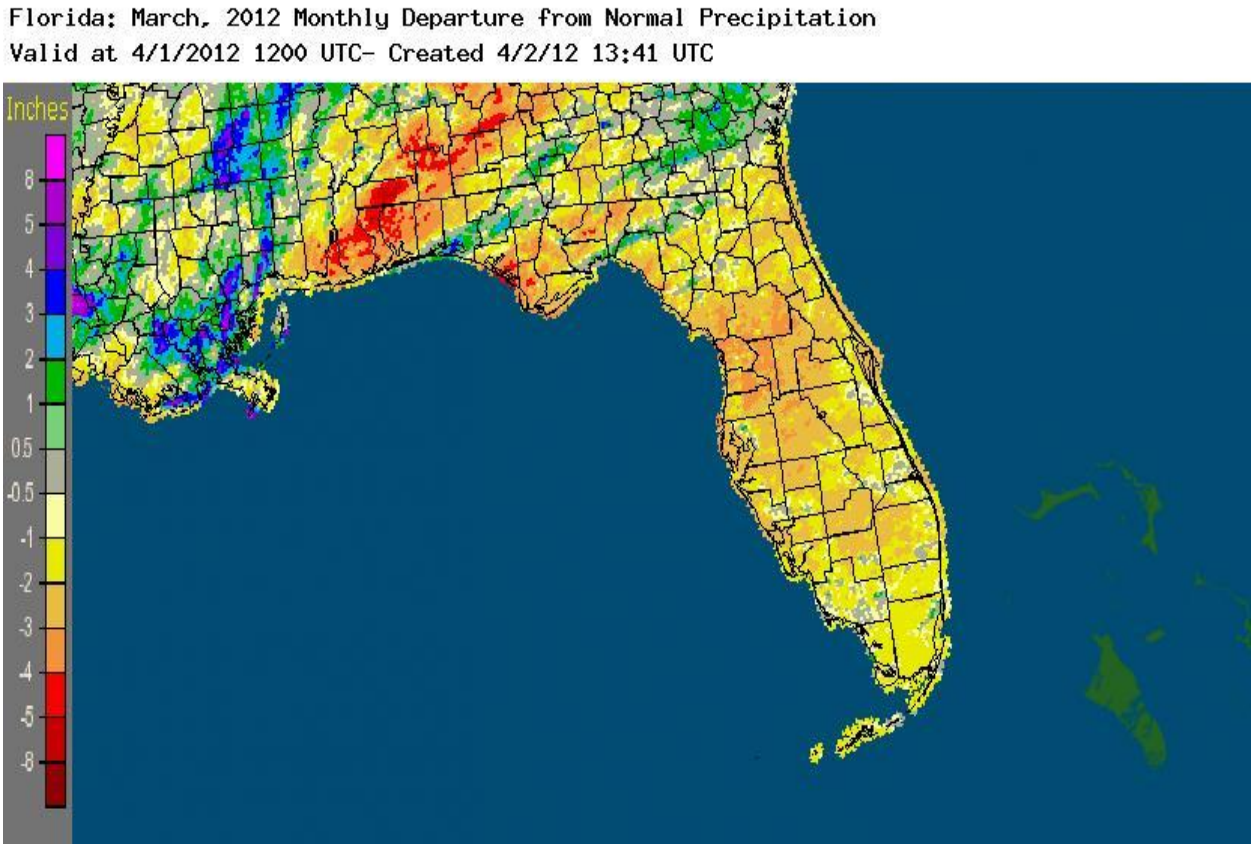

Figure 3: Rainfall depature from normal for March 2012. Almost all of South Florida was 1 to 3 inches below normal for the month.